

# Installation and operating instructions BMW 4-series F33 convertible comfort module

## Before installation:

Please read these instructions carefully and take some time for installation. Improper use can damage the module or the electronics of your vehicle. No claims can be made that are caused by failure to observe the installation instructions. If you do not trust the installation, please contact a motor vehicle specialist.



**Attention: The installation of the module can invalidate the ABE and the manufacturer's guarantee of your vehicle. Do not operate the convertible top or the windows unattended - there is no protection against trapping. The module is installed and operated at your own risk.**

## Functionality:

The module only uses the original functions in the vehicle. All data relevant to convertible top control (e.g. limit switches, window position, speed) are permanently monitored. All standard safety functions (undervoltage / overvoltage shutdown, thermal protection, etc.) are retained.

## Functional scope and operation of the module:

- **Tip function for the convertible top switch:**  
You only have to tap the convertible top switch briefly (2s), then the convertible top opens or closes automatically. The automatic run can be canceled at any time by tapping the switch in the opposite direction. If you press "Up" again while opening, the windows will stay open, otherwise the windows will close at the end of the roof run.
- **Operation of the convertible top while driving up to max. 50Km / h:**  
You can operate the convertible top while driving up to the programmed speed - but up to a maximum of 50Km / h. If the speed limit is exceeded while the top is in operation, an acoustic warning is given.
- **Limit speed freely programmable:**  
If you press the central button for the power windows (windows must be open) in the driver's door for longer than 4s in the closing direction while driving, the current speed is adopted as the new limit. An acoustic signal sounds to confirm acceptance. If you drive faster than 50 km / h, no signal will sound, as the maximum permitted speed is 50 km / h. A speed of 50 km / h is programmed for the first installation. This setting is retained even after the battery has been disconnected.
- **Operation of the convertible top using the original remote control:**  
If you briefly press the "open" button on the remote control key and then hold it down for a longer period, the roof and the windows open fully automatically. The key does not need to be held down during the process. Closing the top works in the same way with the "close button": the car is locked, the top and the windows are locked. For safety reasons, the process can be aborted by pressing the opposite button (e.g. "Open roof" can be aborted with the close button).
- **Diagnose LED:**  
The LED on the back of the module shows the operating status by flashing three times (red or green) when the module is active (ignition must be on). This is very helpful when installing the module or when troubleshooting. The exact meaning of the flashing signals can be found on the last page of these instructions.
- **Battery Safe Function:**  
The module automatically detects when it is not needed and then goes into energy-saving mode. The current consumption then drops to below 0.2mA. This ensures that the module does not burden the battery even after a very long period of time.
- **Workshop mode for TÜV and diagnosis:**  
You can activate or deactivate the module while stationary if you hold the central button for the window lifters (windows and doors must be open) in the close direction for > 4s. The change in status is acknowledged by a tone. In workshop mode (module deactivated) the module behaves completely passively, i.e. all functions work as standard, as if no module were installed. It cannot be found in the vehicle diagnosis either. The module is activated when it is started up for the first time; the setting is retained even after the battery has been disconnected.



**Attention: It is advisable to remove the module for a visit to the workshop, as the installation could invalidate guarantee and / or warranty claims.**

### Installation of the module:

First close the roof, open the trunk and then remove the ignition key.



Image 1: Remove the trunk mat,  
Roof control unit is in the middle under  
the black cross strut (red arrow)



Fig. 2: Loosen the black plug: press the latch  
(red arrow), then fold the bracket to the left  
(yellow arrow)

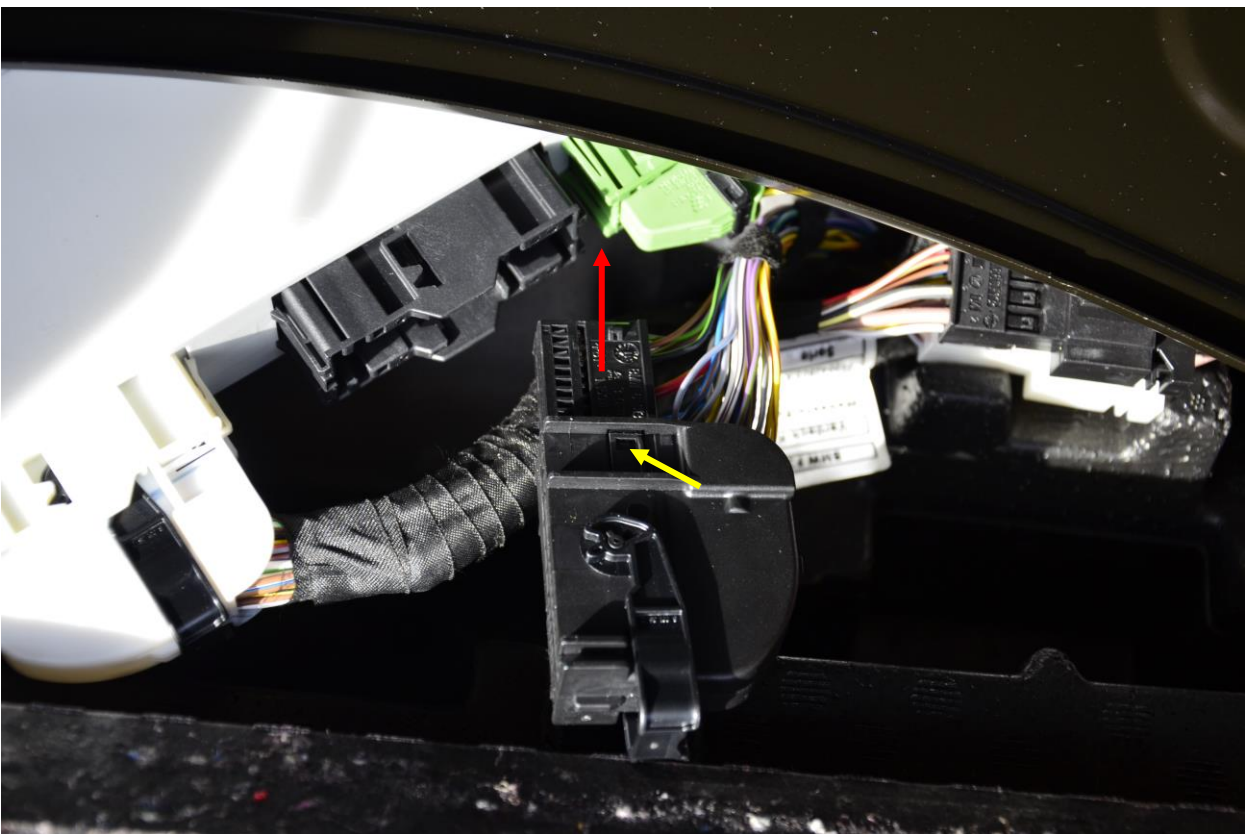


Fig. 3: Pull out the plug insert (red arrow), to do this, lift the locking hook (yellow arrow)



Image 4: Cable gray / blue (gray with blue stripe, pin 13) and gray / yellow (gray with yellow stripe, pin 14) from the plug. On the other side of the connector, the yellow / red (pin 40) and yellow / brown (pin 41) cables must be pulled out of the connector. To do this, press the locking lug down with a screwdriver (red arrow), then pull the cable out a little and press the locking lug down again (2nd lock) (yellow arrow). Now the cable can be pulled completely out of the plug. The pin numbers are printed on the connector (green circles).

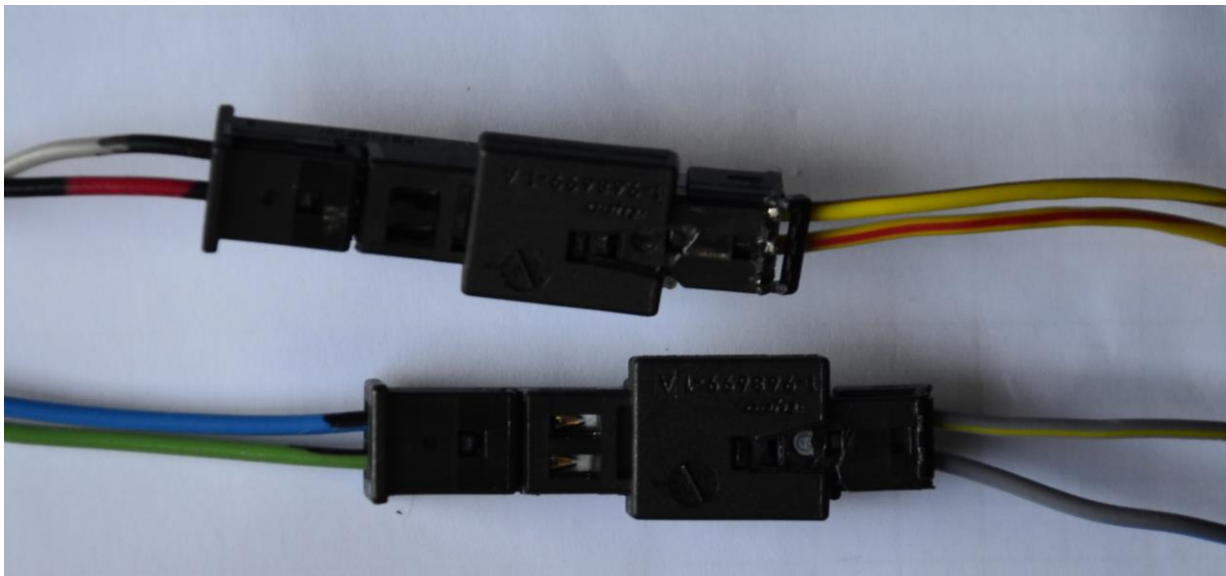
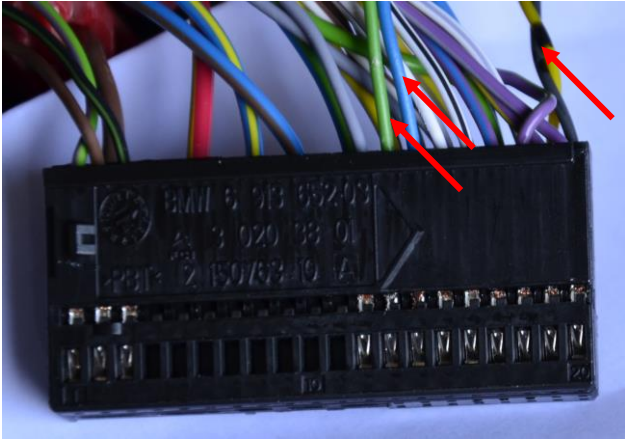


Fig. 5: The 4 removed cables are plugged into the connector sleeves provided and connected

**Connector 1:** yellow/red -> Pin 1 yellow/brown -> Pin 2  
**Connector 2:** grey/blue -> Pin 1 grey/yellow -> Pin 2

The cables are now plugged together with the module, the cable pairs yellow / red and yellow / brown must be connected to red / black and gray / black. The gray / blue and gray / yellow cables are connected to green and blue. Make sure that the blue cable is connected to the gray / yellow cable and the red / black cable to the yellow / red cable.



Pic 6: The loose cables of the module are now plugged into the plug (red arrows):

- Pin 13: green**
- Pin 14: blue**
- Pin 40: yellow/black**
- Pin 41: grey/black**

Make sure that the cables are pushed all the way forward and the contacts click into place.

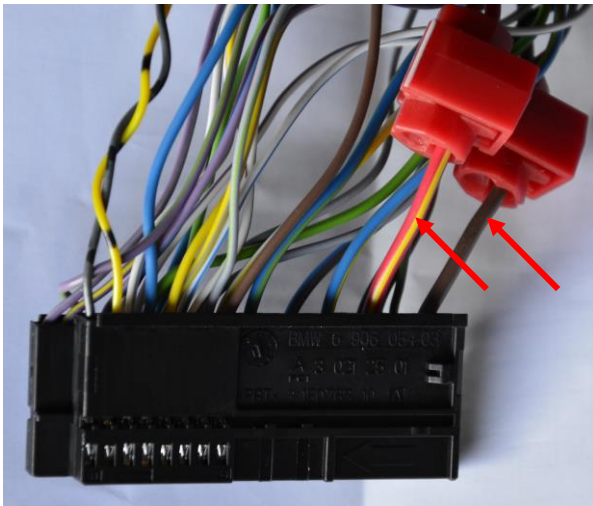


Fig. 7: Connection of the supply:  
The power supply is tapped using the red crimp connectors provided. Connect the two cables (red and black) of the module with the thick cables on the plug to the convertible top control as follows:

<b>Modul</b>	<b>Auto</b>
black (GND)	brown
red (+12V)	red/yellow

To achieve optimal connections, strip the cable on the module by approx. 2 cm, twist it and bend the stripped part in half so that the double cross-section is in the crimp connector. Press the metal bar all the way down with combination pliers.

**Test module installation:**

Turn on the ignition and watch the LED on the back of the module. If everything is OK, the LED will now flash green - green - red

**Troubleshooting via LED module status**






As soon as the ignition is on, the LED flashes three times, followed by a short pause, then the flashing code is repeated.

the first flashing indicates the status of the CAN in the direction of the car (the red / gray twisted cable on the module). If the connection is OK, the LED flashes green, otherwise red.

the second flashing indicates the status of the CAN in the direction of the roof control unit (the yellow / gray twisted cable on the module). If the connection is OK, the LED flashes green, otherwise red.

the third flashing indicates the status of the convertible top switch (the green and blue cables on the module). If the convertible top switch is pressed, the LED flashes green, otherwise red.

**Examples of different blink codes:**

Blink code	meaning
	<ul style="list-style-type: none"> <li>• The module is connected correctly</li> <li>• Convertible top switch is not pressed</li> </ul>
	<ul style="list-style-type: none"> <li>• The module is connected correctly</li> <li>• Convertible top switch is pressed</li> </ul>
	<ul style="list-style-type: none"> <li>• CAN connection to the car is not OK (red / gray twisted cable on the module) Check whether cables are connected as shown in Figure 5</li> </ul>
	<ul style="list-style-type: none"> <li>• CAN connection to the convertible top control unit is not OK (yellow / gray twisted cable on the module) Check whether the cables are plugged in correctly as shown in Figure 6</li> </ul>
 (blinkt nicht)	<ul style="list-style-type: none"> <li>• Ignition off: module is in idle state</li> <li>• Module does not receive any power: The red cable of the module must be connected to 12V, the black cable to earth. Check crimp connectors, solder cables if necessary.</li> </ul>

**Note:**

If you visit a workshop with the vehicle, please indicate the installation of the module. If you have problems with the electronics, please check whether the module is still working correctly - a loose contact (e.g. through the crimp connector) is often the cause.